

Figure 1 is a schematic diagram of a cross-section of a composite material. It shows a central rectangular region (320) with a diagonal hatching pattern, surrounded by a matrix (310) with a wavy pattern. A vertical line (10) is on the left. Angles  $\beta_0$ ,  $\beta_1$ , and  $\beta_2$  are indicated. Dimensions  $L_{31}$  and  $L_{32}$  are shown at the bottom.

FIG 2

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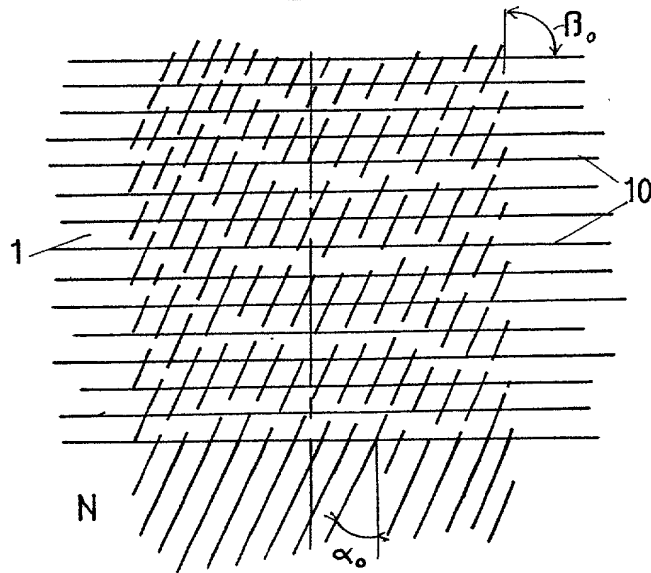
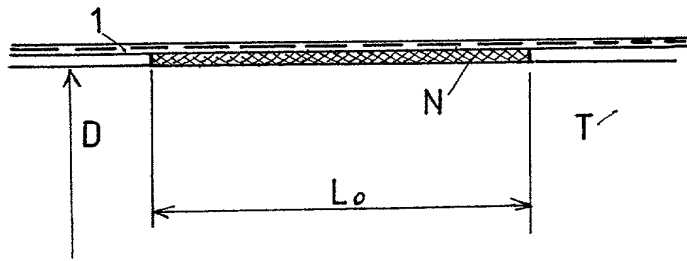


Diagram of a beam element of length  $L_1$ . A distributed load  $D_1$  acts upwards. A normal force  $N$  acts to the right at the right end. A shear force  $T$  acts downwards at the right end.

FIG 4A

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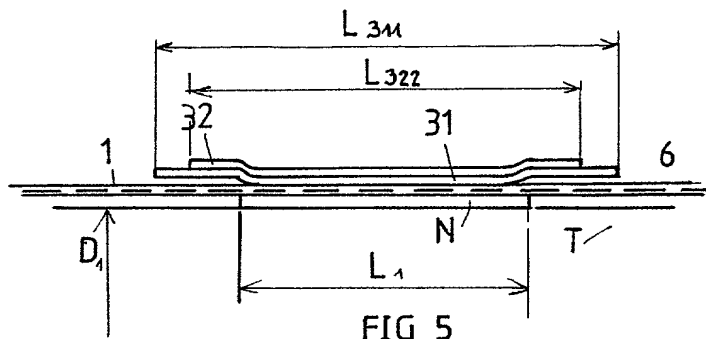


FIG 5

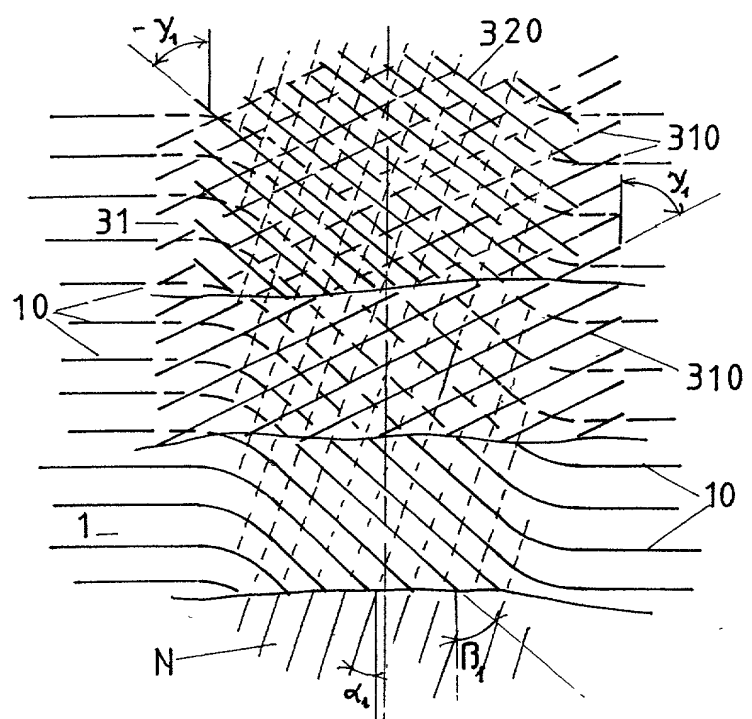


FIG 5A

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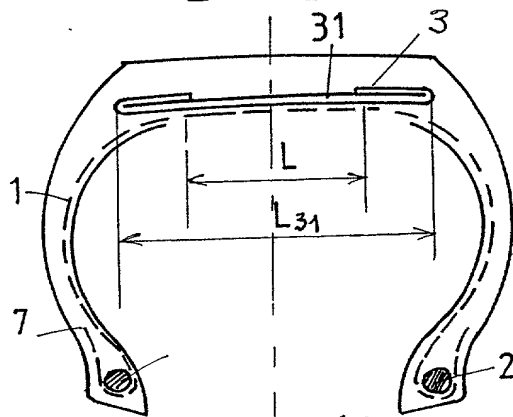


FIG 6A

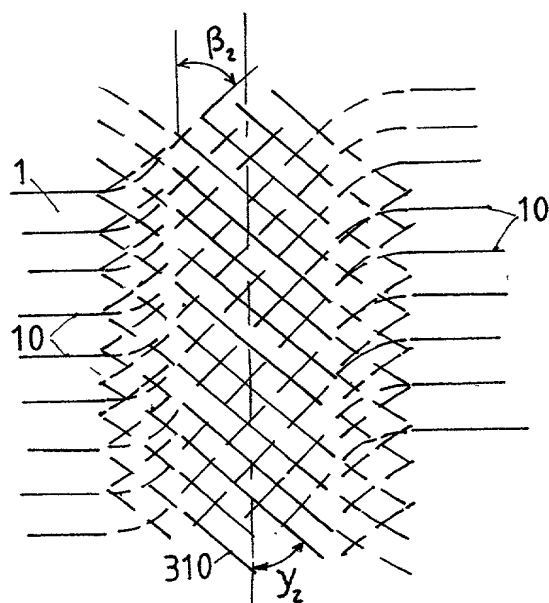


FIG 6B